

XV.—On new Species of Mus from Borneo and the Malay Peninsula. By J. LEWIS BONHOTE, M.A.

IN working out the extensive collection of mammals recently brought home by Messrs. Robinson and Annandale from the Malay Peninsula, I find that the following species in the British Museum from Borneo are undescribed. I have added a preliminary description of one of the species brought home by Messrs. Robinson and Annandale which belongs to this group.

I have to express my thanks to Mr. Gerritt S. Miller, of the U.S. National Museum, for kindly lending me specimens of his recently described species from the Malay Peninsula for comparison.

Mus rapit, sp. n.

Similar in size and general coloration to *Mus pellax*, Miller, but with slightly longer tail and smaller skull. Fur thick and ample, intermixed with soft spines, so soft as in some cases to be hardly felt.

General colour tawny ochraceous, intermixed with black, which predominates along the centre of the back. Underparts pale cream, sharply defined from the colour of the back. The light colour does not extend to the foot. Feet dark brown, the toes and a line on either side from the ankle white; on the fore legs the white colour is continuous with that of the underparts. Tail very long and ending in a pencil of hairs; colour at the root and along the upper surface dark brown, below lighter but not sharply defined.

The skull is apparently (I have no specimens with which to compare) very similar to that of *Mus pellax*, Miller, but very slightly smaller. The bullæ are very small and the muzzle long and narrow. There is a slight swelling on either side between the ends of the nasals and roots of the zygoma and the supraorbital ridges are well marked. The nasals are long and taper towards their posterior end, which is, as in *Mus pellax*, some way behind the nasal branches of the premaxillary.

Dimensions of type (from dried skin):—Head and body 173 millim.*; tail 223*; hind foot 29·5.

Skull.—Palatal length 16·5 millim.; diastema 11; length of incisive foramina 6·5; length of nasals 15; zygomatic

* Probably stretched.

breadth (approx.) 18; interorbital breadth 6·5; greatest breadth of brain-case 16; length of molar series (alveoli) 6.

Hab. Mount Kina Balu, Borneo.

Type. B.M. 93. 4. 1. 15. Kina Balu, Borneo. Collected in October 1892 by Mr. A. H. Everett.

This species is quite distinct from all others except *pellax*. The greater length of the tail and the presence of hairs at its extremity form a ready method of distinction.

I have named this species "*rapit*" from its local Bornean name.

On further investigation I find that the type of *Mus Jerdoni*, now in the Calcutta Museum, is only half-grown. Mr. Thomas, in his paper on the Indian species of *Mus**, gives the measurements of adult *Jerdoni* as—head and body 5·3 inches (135 millim.), tail 7–8 inches (190 millim.); thus making it to agree fairly well with *Mus pellax*, which is probably a synonym. If this should prove to be so, the present species is the Bornean form of *Mus Jerdoni*.

Mus kina, sp. n.

General size, colour, and characters as in *Mus cremoriventer*, Mill. Fur very numerously beset with short soft spines. General colour light ochraceous, much paler than in *Mus rapit*, interspersed with *very long* black hairs, most conspicuous on the central dorsal region. Underparts (including the inner sides of the limbs) dull white, the colour being sharply marked off from that of the back. Tail longer than the head and body, nearly uniform in colour throughout, having only a slightly lighter tinge on the underside. Hind feet dark brown, edged with ochraceous, the toes and a small margin to the ankle white. Fore feet whitish, slightly suffused with ochraceous.

Whiskers as well as the eye-bristle black and very long.

Skull.—Similar to that of *Mus cremoriventer*, but somewhat larger. The nasals, longer than those of *cremoriventer* and tapering, end posteriorly in the same line as the præmaxillæ. The supraorbital ridges are well marked, but diverge more gradually over the anterior portion of the brain-case than in *cremoriventer*. On the underside, except in size, the skull does not offer any noticeable points of difference; but the afterpart of the skulls of my series being cut off, I have been unable to compare the size of the bullæ &c.

* P. Z. S. 1881, p. 539.

Dimensions of type (measured in the skin):—Head and body 146 millim.; tail 176; hind foot 26.

Skull.—Palatal length 15 millim.; diastema 9·5; length of incisive foramina 6; length of nasals 13·5; zygomatic breadth 16·5; interorbital breadth 6; greatest breadth of brain-case 15; length of molar series 6.

Hab. Mount Kina Balu, Borneo.

Type. B.M. 94. 7. 2. 24. Mount Kina Balu. Collected in January 1894 by Mr. A. H. Everett.

Although from the skins there is apparently little difference between this species and *Mus cremoriventer*, the larger size of the skull will enable it to be very easily recognized. Not having any measurements in the flesh, it is difficult to say whether it would be recognizable by its size without reference to the skull.

Mus bukit, sp. n.

Similar in appearance to *Mus cremoriventer*, Mill., but larger, approaching in size to *Mus rapit*.

Fur densely studded with soft white spines. Above dull ochraceous, intermixed with short black hairs. Below yellowish white. Tail bicolor and slightly longer than head and body.

Skull.—Similar to that of *M. rapit*, but with shorter muzzle and larger bullæ. Supraorbital ridges conspicuous and well marked, extending backwards to inferior margin of parietals. Anterior root of zygoma broad, much broader than in *M. rapit*.

Dimensions (measured in the flesh):—Head and body 121 millim.; tail 148; hind foot 24·5.

Skull.—Greatest length 37 millim.; palatal length 16; diastema 9·5; length of nasals 15; zygomatic breadth 18.

Hab. Bukit Besar, Jalor, 2500 feet.

Type. Ad. ♂. Bukit Besar. Collected 10th May, 1901, by Messrs. H. C. Robinson and N. Annandale. Original number 11.

An easily distinguishable form of the *Mus Jerdoni* group, of which there are specimens in the Museum from Siam. The above is only a preliminary description; a full description and measurements will be published in the report on Messrs. Robinson and Annandale's collection.